. 5

10

15

## WHAT IS CLAIMED IS:

- 1. Use in the preparation of a medicament for prophylaxis or treatment of an acute inflammatory disorder in a mammalian patient of an effective amount of pharmaceutically acceptable bodies carrying an effective number of phosphate-containing groups presented or presentable on the surface of said bodies, the phosphate-containing groups comprising a plurality of phosphate-glycerol groups or groups convertible to such groups, to inhibit and/or reduce the progression of the acute inflammatory disorder, said bodies being of a size from about 20 nanometers (nm) to 500 micrometers (μm).
  - 2. Use as claimed in claim 1 wherein the acute inflammatory disorder features an upregulation of at least one pro-inflammatory cytokine.
  - 3. Use as claimed in claim 2 wherein the pro-inflammatory cytokine is selected from TNF-α, INFγ, IL-1 and IL-12.
  - 4. Use as claimed in claim 1 wherein the acute inflammatory disorder features a downregulation of at least one anti-inflammatory cytokine
  - Use as claimed in claim 4 wherein the anti-inflammatory cytokine is selected from TGF-β, IL-10 and IL-4.
- 20 6. Use as claimed in claim 5 wherein the anti-inflammatory cytokine is TGF-β.
  - 7. Use as claimed in any preceding claim wherein the bodies are essentially free of pharmaceutically active entities other than phosphate-containing surface groups.
- 25 8. Use as claimed in any preceding claim wherein the phosphate-glycerol groups constitute 60% 100% of the phosphate-containing surface groups on the bodies.
  - 9. Use as claimed in any preceding claim wherein the phosphate-glycerol groups correspond to the formula:
- 30 -O-P(=O)(OH)-O-CH<sub>2</sub>-CH(OH)-CH<sub>2</sub>-OH

10. Use as claimed in any preceding claim wherein the bodies are liposomes constituted to the extent of 60 - 100% by weight of a phosphatidyl glycerol phospholipid corresponding to the formula:

where R and  $R^1$  are independently selected from  $C_1 - C_{24}$  hydrocarbon chains, saturated or unsaturated, straight chain or containing a limited amount of branching wherein at least one chain has from 10 to 24 carbon atoms.

10

5

- 11. Use as claimed in any preceding claim wherein the acute inflammatory disorder is acute allergic or toxic reaction from surface contact with environmental allergen or drugs through anaphylactic shock.
- 15 12. Use as claimed in claim 11 wherein the acute inflammatory disorder is allergic contact dermatitis or acute hypersensitivity.
  - 13. Use as claimed in any of claims 1-10 wherein the acute inflammatory disorder is acute neurological inflammatory injury.

20

14. Use as claimed in any of claim 1-10 wherein the acute inflammatory disorder is acute neuronal injury resulting from cardiopulmonary bypass surgery.